MEDICAL COUNCIL OF INDIA

RECOMMENDATIONS
ON
GRADUATE MEDICAL EDUCATION

Adopted by the Medical Council of India in March 1981

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BY
THE MEDICAL COUNCIL OF INDIA

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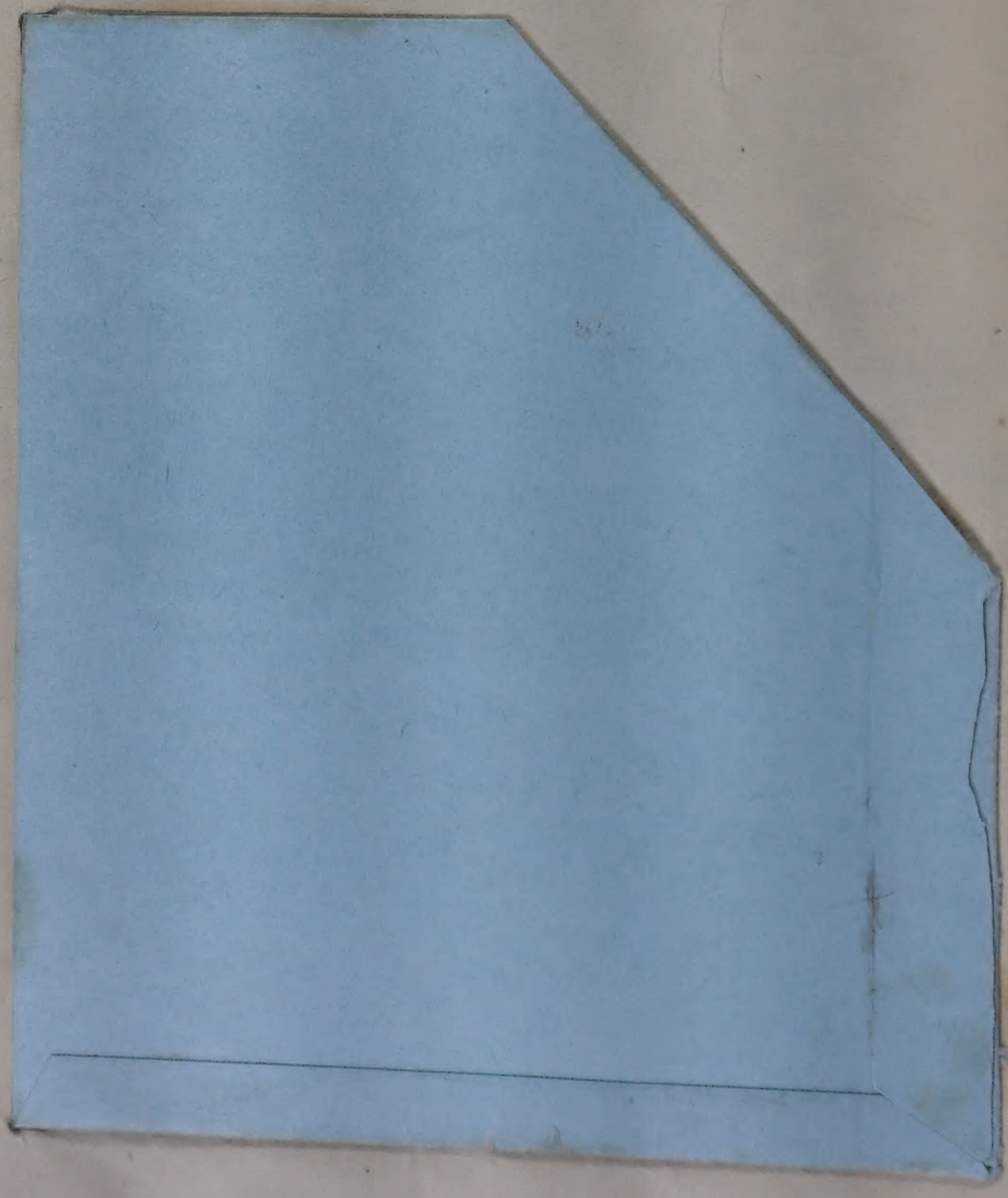

MINIMUM RECOMMENDATIONS
of the
MEDICAL COUNCIL OF INDIA
on
GRADUATE MEDICAL EDUCATION

Adopted by the Medical Council of India in March, 1981

PREAMBLE

1.1. Not withstanding the curricular contents prescribed by the Medical Council of India and amended from time to time, no scientific evaluation of what has been in vogue for more than 2 decades has been undertaken nor a study made of the medical graduates from the different colleges of the country. Only on the basis of such evaluation it can be decided whether any deficiency in the training programme exists. Such evaluation can be undertaken by the Council provided the necessary facilies are sanctioned by the Central Government.

1.2. Deficiencies which exist at present, if any, are attributable more to a failure of implementation of Council recommendations and the absence of a system of continuous monitoring of the training scheme. It is not due to defects in the course and curriculum prescribed.

1.3. Graduate medical curriculum is oriented towards training students to undertake the responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative and rehabilitative aspect of medicine. It can hardly be oriented towards producing specific type of doctors as the graduate has a wide choice of career opportunities and his training must continue to be broad based and flexible. To undertake the responsibilities of service situations which is a changing condition and of various types, it is essential to provide adequate inservice training tailored to the needs of the service to enable the graduates to be effective instruments of implementation of service requirements.

1.4. The Council recognises the importance of the community aspects of health care and of rural health care services. This aspect of the training of graduates has been adequately recognised in the prescribed curriculum. Its importance has been systematically up graded over the past years and adequate exposure to such experiences has been provided throughout all the three phases of training. This has been further emphasised and intensified by providing on the job instruction and training during the internship period. The aim of the period of rural training during internshipis to enable the fresh graduates to function efficiently under such settings.

1.5. A judicious balance between the preventive, promotive, curative and rehabilitative aspects of medical education and practical training has been maintained so as to produce a well balanced and all round graduate. It is also designed to encourage self-education as continuing self-education is essential for all physicians and further development in different aspects of medical science and technique.

1.6. Graduate medical education per *se* cannot be tailored to service situation for which in service training is essential. The educational process should enable the graduate to adapt himself to different service situations on the basis of actual experience and in service training. However, the educational experience has been duly modified to make it health oriented instead of disease oriented. As such all the basic concepts of modern scientific medical education are adequately dealt with.

1.7. Graduate education has to be flexible in nature to offer a wide range of employment opportunity.

1.8. Although for the purpose of proper evaluation in the various subjects comprising the medical educational course the period 4½ years training has been divided into blocks of 18 months with a university examination at the end of each period, every attempt must be made to reduce artificial compartmentalization of the curriculum into pre-clinical, para-clinical and clinical subjects by a system of integrated teaching. Further introduction of semester system may be encouraged wherever practicable without detriment to the overall requirements of graduate education.

1. Admission to the Medical Course

No candidate shall be allowed to be admitted to the Medical Curriculum proper until:

(i) he has completed the age of 17 years at the time of admission or will complete the age on or before 31st December of the year of his admission to the Ist M.B.B S. course.

(ii) he has passed :

(a) The Higher Secondary Examination or the Indian School Certificate Examination which is equivalent to 10+2 Higher Secondary Examination after a period of 12 years study, the last two years of study comprising of physics, Chemistry, Biology and Mathematics or any other

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elective subject with English at a level not less than the Core course for English as prescribed by the National Council for Educational Research and Training after the introduction of the 10+2+3 years educational structure as recommended by the National Commitee on education.

Note : Where the course content is not as prescribed for 10+2 education structure of the National Commitee, the candidates will have to undergo a period of one year pre-professioal training before admission to the Medical colleges.

(b) the Intermediate examination in science of an Indian University/Board or other recognised examining body with Physics, Chemistry and Biology which shall include a practical test in these subjects ;

OR

(c) the pre-professional/pre-medical examination with Physics, Chemistry and Biology, after passing either the higher secondary school examination, or the pre-university or an equivalent examination. The Pre-professional/ Pre-medical examination shall include a practical test in these subjects ;

OR

(d) the first year of the three years degree course of a recognised university, with Physics, Chemistry and Biology including a practical test in these subjects provided the examination is a "University Examination" :

OR

(e) B. Sc. examination of an Indian University, Provided that he has passed the B. Sc. examination with not less than two of the following subjects. Physics, Chemistry, Biology (Botany, Zoology) and further that he has passed the earlier qualifying examination with the following subjects; Physics, Chemistry, Biology and English.

OR

(f) any other examination which, in scope and standard is found to be equivalent to the intermediate Science examination of an Indian University/Board, taking Physics, chemistry and Biology including a practical test in each of these subjects and English.

(a) The pre-medical course may be conducted either at Medical College or a Science College.

(b) After the 10+2 course is introduced the integrated courses should be abolished.

Selection of Students :

The selection of students to medical college shall be based solely on merit of the candidate and for determination of merit, the following criteria be adopted uniformly throughout the country :—

(a) In States, having only one Medical College and one University/Board/Examining Body conducting the qualifying examination, the marks obtained at such qualifying examination, be taken into consideration.

(b) In States, having more than one University/Board/Examining Body conducting the qualifying examination (or where there is more than one medical college under the administrative control of one authority), a competitive entrance examination should be held so as to achieve an uniform evaluation as there may be variation of standard at qualifying examination conducted by different agencies.

(c) Where there are more than one college in a State and only one university/board conducting the qualifying examination then a joint selection board be constituted for all the colleges.

(d) A competitive entrance examination is absolutely necessary in the cases of Institutions of All India character.

(e) To be eligible for competitive entrance examination, candidate must have passed any of the qualifying examinations as enumerated under the head-note "Admission to Medical Course".

Provided also that a candidate for admission to the Medical Course must have obtained not less than 50% of the total marks in English and Physics, Chemistry & Biology taken together (i) at the qualifying examination (or at the higher examination) in the case of medical colleges where the admissions are made on the basis of marks obtained at these examinations or (ii) 50% of the total marks in English and Physics, Chemistry and Biology taken together at the competitive entrance examination where such examinations are held for selection.

Provided further that in respect of candidates belonging to Scheduled Castes/Scheduled – Tribes, the minimum marks required for admission shall be 40% in lieu of 50% for general candidates.

Where the seats reserved for Scheduled Castes and Scheduled Tribes students in any State cannot be filled for want of requisite number of candidate fulfilling the minimum requirements prescribed from that State then such vacant seats may be filled up on all India basis with Scheduled Castes and Scheduled Tribes candidates getting not less than the minimum prescribed pass percentage.

The authorities (State Governments and Universities) are strongly advised to arrange special coaching classes for Scheduled Castes/Scheduled Tribes candidates before the qualifying competitive examination to enable them to come up to the appropriate standard for admission to the Medical Course.

Provided further that the students educated abroad seeking admission into medical colleges in India, must have passed in the subjects of Physics, Chemistry, Biology and English upto the 12th standard level with 50% marks.

III Duration of course :

(1) Every student shall undergo a period of certified study extending over 4½ academic years from the date of commencement of his study for the subjects comprising the medical curriculum to the date of completion of the examination followed by one years' compulsory rotating internship.

(2) The first 18 months shall be occupied in the study of the phase I (Pre-clinical subjects) & introduction to a broader understanding of the perspectives of medical education leading to delivery of health care and no student shall be permitted to join the Phase II (Para-clinical/clinical) group of subjects until he has passed in all the phase I (Pre-ClinicalSubjects) for which he will be permitted not more than four chances actual examination), provided four chances are completed in 3 years.

(3) After passing Pre-clinical subjects, 3 years shall be devoted to clinical subjects and pre-clinical subjects concurrently, subjects will be taught with the clinical subjects, collaterally & concurrently.

(b) The migration/transfer can be allowed by the University concerned within three months after passing the 1st professional examination, as a rule.

(c) Migration/transfer of students during the course of their training for the clinical subjects should be avoided.

(d) The number of students migrating/transferring from one medical college to another medical college during one year will be kept to the minimum so that the training of the regular students of that college is not adversely affected. The number of students migrating/transferring to/from any one medical college should not exceed the limit of 5% of its intake in any one medical college in one year.

(e) Cases not covered under the above regulations are to be referred to the Council for consideration on individual merits.

(f) An intimation about the admission of migrated/transferred students into any medical college should be sent to the Council forthwith.

VI. Phase I (Pre-clinical subjects)

IN THE TEACHING OF THESE SUBJECTS STRESS SHALL BE LAID ON FUNDAMENTAL AND BASIC PRINCIPLE OF THE SUBJECTS WITH MORE EMPHASIS ON THEIR APPLIED ASPECTS AND DETAIL SHALL BE AVOIDED.

A. The period of the 1st Phase of study comprising the subjects of Anatomy, Physiology & Biochemistry should be 15 months. The subjects of study during this period shall be :-

1. *Human Anatomy* : The course shall comprise of :
   (a) principles of human embryology ;
   (b) principles of human genetics
   (c) histology ;
   (d) gross anatomy of the entire human body including living anatomy and applied anatomy

The practical teaching in gross Anatomy should be done by the students dissecting the human body along with demonstrations of dissected part or models and charts of other parts. However, time should be made available from this period for exposure to community medicine by reducing the quantum of hours allotted for discussion.

2. *Human Physiology* : The course shall comprise of :

(*a*) general systemic physiology of the human body.

(*b*) principles of bio-physics as applicable to the human body.

(*c*) growth, development, nutrition and dietetics

(*d*) experimental work involving demonstration of functions of various organ systems on mammalian and other animals including use of instruments required for such demonstration for the purpose of assessment of functions in the human body.

(*e*) general aspects of the applied physiology and clinical human physiology.

3. *Bio-chemistry* :

(*a*) The course in biochemistry should be oriented to human biochemistry with emphasis on the applied aspects of bio-chemical processes in conditions of health & disease ;

(*b*) Biochemical examinations of sample of body fluids etc.

(*c*) Laboratory work in practical bio-chemistry.

(*d*) general aspects of the metabolic basis of diseases.

Biochemistry shall be an independent department. The teaching of human physiology and biochemistry should be collaborative. During the above training demonstrations should be arranged jointly with the clinical departments where applied aspects of Anatomy, Physiology and Bio-chemistry should be demonstrated.

Three remaining months of the pre-clinical period are to be devoted to the introduction of clinical orientation of students which shall consist of the following:—

(*a*) History of Medicine.

(*b*) Role of nutrition in health & diseases.

(*c*) Health economics.

(*d*) Introduction to Community Medicine, including:—

(*i*) Principles of sociology including demography, population dynamics, social factors related to health and diseases, urban and rural societies impact of urbanisation on health and diseases, community behaviour and ecology.

(*ii*) Elements of normal psychology and social psychology.

(*iii*) The students shall also be introduced to the principles of practice of medicine including visits to the hospital for familiarisation with elementary nursing practices, practices of sterilisation, injection and dressing techniques, necessity for record keeping, art of communication with patients including history taking medico-social work and immunisation against diseases and health check up.

(1) The introductory lectures particularly (a), (b), (c) & (d) (i), & (ii) are to be phased preferably in the first three months of the course so as to leave an uninterrupted period of teaching in Anatomy, Physiology and Biochemistry.

(2) (d) (iii) is to be spread out during the whole preclinical period by suitable arrangements of time table.

(3) Teaching of community medicine, should be both theoretical as well as practical. The practical aspects of the training programme should include visits to the health establishments and to the community where health intervention programmes are in operation.

(4) In order to inculcate in the mind of the students the basic concepts of community medicine to be introduced in this phase of training, it is suggested that the detailed curriculum drawn should include at least 30 hours of lectures, demonstrations seminars etc., together with alteast 15 field visits spread over 18 months in various aspects of community medicine.

(5) The examination shall be limited to Anatomy, Physiology and Biochemistry and the preclinical courses including examination is to be completed within 18 months.

VII PHASE II (Paraclinical/clinical subjects)

This phase shall be taught over a period of 18 months collaterally with clinical subjects. The course shall consist of :

(1) Pathology and Microbiology :

(*a*) General pathology of diseases commonly encountered in the community & their..... morbid anatomy.

(*b*) Clinical and chemical pathology as related to commonly encountered diseases

(*c*) Microbiology with special emphasis on their preventive aspects including introduction to the principles & practice of virology, mycology etc.

(*d*) Parasitology with special emphasis on the prevailing parasitic diseases of India

(*e*) Immunology & related Phenomenon.

The teaching of applied pathology should be continued even after this phase is concluded during rest of the medical course.

Teaching in pathology and microbiology should be coordinated and reflect their close relationship with each other.

The training during this period will also include practical instructions and the conduct of autopsies of alteast 10 cases.

2. Pharmacology including Pharmacy, pharmacotherapy and toxicology of drugs and study of drugs in Indian Pharmacopia and introduction of clinical Pharmacology.

Clinical pharmacology could be taught more usefully in collaboration with teachers of clinical medicine, paediatrics etc., and group discussions should be held taking actual cases where therapeutic programmes are carried out in the ward.

Experimental pharmacology by demonstrations and practicals by students.

3. Forensic Medicine: This course shall include forensic Toxicology, instruction in the duties which devolve upon practitioners in their relation to the State, and on the generally recognised rules of medical ethics. It is desirable to take batches of students by teachers when they are on Court duties to introduce them to the elements of legal aspects of medicine. Atleast 10 cases of medicolegal autopsies are to be attended by students and certificate of attendance may be given by the authority conducting autopsies.

4. Community Medicine : The course in Community Medicine during this period of training shall comprise of :

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(*a*) Community health, special emphasis on rural health programme.

(*b*) Health promotion & Health Education.

(*c*) National health programmes.

(*d*) Family planning and population control.

(*e*) General epidemiology.

(*f*) Health care delivery systems.

(*g*) Maternal and child Health.

(*h*) Occupational health and other non-communicable diseases.

(*i*) Practice of health education.

(*j*) Concept of comprehensive medical care.

(*k*) Further study of biostatistics and vital statistics, and medical certification.

(*l*) Health Education.

(*m*) Health Administration.

(See Appendix 'B' for details).

As far as the teaching of the Commnnity medicine is concerned, health/medical officers in the service of the State who have adequate field experience should be utilised for teaching of community medicine giving them appropriate status, if necessary. Likewise medical college teachers should by rotation be posted in field practice areas, with batches of students to introduce community orientation in training programmes.

VIII. PHASE III (Continuation of study of Clinical subjects for three years. The period after passing phase I of the course).

Didactic lectures may not exceed half of the time in class room teaching and the rest should consist of group discussions, seminars etc.

Instructions in clinical subjects should be given both in the outpatient and inpatient during clinical postings.

The course shall comprise of :

1. Medicine :

(*a*) A course of systematic instruction in the principles and practice of Medicine ; with special emphasis on Tropical Diseases.

(*b*) Lecture demonstrations seminars and conference in clinical medicine during the 3 years shall run Concurrently with other clinical subjects; Didactic lectures should exactly be one third of the total teaching time.

(*c*) Instructions in comprehensive medical care.

(*d*) Instructions in applied anatomy and physiology, biochemistry, pathology and pharmacology throughout the period of clinical studies ;

(*e*) Instructions in dietectics, nutrition and principles of nursing ; Medical Rehabilitation ; practical instructions in routine procedures e.g. infusion, tranfusion, paracentesis, etc. shall be imparted during clinical posting concurrently.

2. Surgery including Orthopaedics ;

(*a*) A course of systematic instructions in the principles and practice of surgery including orthopaedics and Surgical diseases in infancy and childhood.

(*b*) Lecture demonstrations, seminars and conference in clinical surgery during the 3 years, shall run concurrently with other clinical subjects.

(*c*) Practical instruction in sterilization techniques minor surgical procedures including first aid ; bandages splintings, plasters, etc.

(*d*) Instruction in the administration of anaesthetics.

(*e*) A course of practical instruction in common operative techniques.

(*f*) The period of clinical clerkship of 1 month in Orthopaedics should be both inpatient and outpatient and should include lecture demonstrations.

(*g*) One month of clinical clerkship in the casualty and emergency department which should be of the inservice type.

(*h*) The clinical clarkship in surgery shall consist of both outpatient and in- patient training . The details of clinical clerkship are given separately.

(3) Obstetrics and Gynaecology, Family Planning and Nutrition.

(*a*) Course of systematic instruction in principles and practice of Obstetrics & Gynaecology and care of the new born, maternal health and family planning including applied anatomy, physiology and pathology,

(*b*) Lecture demonstrations in clinical, obstetrics, gynaecology, care of new born and maternal health.

(*c*) Attendance of a maternity hospital or the maternity wards of a general hospital including (i) antenatal care (ii) the management of the puerperium and (iii) a period of 5 months in-patient and out-patient training including family planning.

Not less than two third of the hours of clinical instruction shall be given to obstetrics, including antenantal care and care of new born and maternal health.

(*d*) Of this period of clinical instruction, not less than one month shall be spent as a resident pupil either in a maternity wards of a general hospital.

During this period, the student shall conduct at least 10 cases of labour under adequate supervision and assist in 10 other cases.

A certificate showing the number of cases of labour attended by the student in the maternity hospital and/or in-patient homes respectively, should be signed by a responsible medical officer on the staff of the hospital and should state :

(*a*) that the student has been present during the course of labour and personally conducted each case ; making the necessary abdominal and other examinations under the supervision of the certifying officer who should describe his offical position.

(*b*) that satisfactory written histories of the cases conducted including where possible antenatal and postnatal observations, were presented by the student and initialled by the supervising officer.

4. Paediatrics including Social Paediatrics and Neonatology and Nutrition. The course of systematic instructions in growth

and development, management of Medical Diseases of infancy and childhood, Paediatric surgery, Social Paediatries and Nutrition.

5. *Eye and E.N.T* : The course should cover the common diseases of the Eye and E.N.T. including rehabilitation of the Blind, and Deaf and Dumb.

6. *Community Medicine Posting* : The students shall either be posted in the Health Training Centre unit or in one of the Primary Health Centres attached to a Medical College or Rural Hospital or such posting shall be given by visits to the field practice area according to the facilitities available and the student shall participate during this period in various activities of preventive and promotional health programmes at the centre. Where sufficient facilities for taking the student to rural areas are not yet developed urban field practising area (slums) may be used for this purpose in the initial stages Such postings shall be arranged during the IInd & IIIrd phases. The details of this posting should be worked out by the institution concerned. Students are to be inducted to National Health Programmes during these postings and given an overall comprehensive view of the nature & objectives of these programmes.

N. B. (1) For developing community posting facilities each Medical College should be in total charge of three Primary Health Centres where the teachers from all disciplines in the Medical College should be posted by rotation. The number of Primary Health Centres should gradually be increased so as to cover the entire district.

(2) It is necessary to pool the resources of the medical colleges, district and sub-divisional level hospitals and primary health centres in the referral services complex with required augmentation in respect of transportation, equipment, drugs etc. and for providing residential accommodation at district, sub-divisional hospitals and primary health centres.

7. *Practical Skills*: Due stress should be laid on the student acquiring pratical skills in the following procedures:—

(*i*) Simple laboratory techniques, e. g. Blood examinations, Urine analysis, stool and sputum examinations.

(*ii*) Recording of Blood Pressure.
(*iii*) Injection *i.e.* Subcutaneous, Intramuscular & intravenous.
(*iv*) Infusions and transfusions.
(*v*) Venesection.
(*vi*) Paracentesis.
(*vii*) Lumbar Puncture.
(*viii*) Immunisation techniques.
(*ix*) Pre-operative preparation of patient.
(*x*) Incision & Drainage of absesses, Dressings.
(*xi*) Wound suturing and dressing.
(*xii*) Application of splints, bandages, slabs & Plasters.
(*xiii*) Episiotomy & Suturing
(*xiv*) Vasectomy and I.U.D. insertion.
(*xv*) Other common procedures.

The clinical postings will be according to the following schedule and students will be posted for a period of not less than 3 hours per day.

Ist Clinical Year (i.e. II M.B.B.S.I. and II term)
Total period 11 months)

Medicine	3 months
Surgery	3 months
Obst. &Gynae.	2½ months
Dentistry, Anaesthesia, Psychiatry, Tuberculosis, Radiology.	(15 days each Total 2½ months.

IInd Clinical year (i.e. II M.B.B.S. III term and III M.B.B.S.I. Term)
(Total period 10 months)

O.P.D., Infectious Diseases, Paediatrics, Orthopaedics, E.N.T., Dermatology, Ven, Leprosy, Community Postings, Casualty	One month each
Family Planning	15 days
Ophthalmology.	1½ months

N.B. Out-patient Department,

This posting shall be in addition to the work at the Out-patient Department with the Unit where the student has been posted to conduct his regular clinical term. The intention of this posting is to expose the student to a General Practioner's out-patient system which needs to be developed at all Medical College Hospitals.

IIIrd Clinical Year (i.e. III M.B.B.S. II & III term)
(Total period 10 months)

Medicine Surgery Obst. & Gynae. Paediatrics	2½ months each

IX Appointment of Examiners

1. No person should bc appointed an as examiner in any of the subjects of the Professional examination leading to and including the final Professional-examinations for the award of the M.B.B.S. degree unless he has taken atleast five years previously, a doctorate degree of a recognised university or an equivalent qualification in the particular subject as per recommendation of the council on teachers' eligibility qualifications and has had at least five years of total teaching experience in the subject concerned or in allied subjects in a college affiliated to a recognised university.
2. There shall be at least five examiners—out of whom not less than 2 must be external examiners. Of the five examiners, the Senior most examiner will act as the Chairman and co-ordinator of the whole examination programme so that a uniformity in the matter of assessment of candidates is maintained.
3. Non-medical scientists engaged in the teaching of medical student may be appointed examiners in their concerned subjects provided they possess requisite qualifications and five year teaching experience of medical students after obtaining their postgraduate qualifications.
4. External examiners should preferably be from outside the State.
5. The Internal Examiner in a subject should not accept external examinership for a college from which external examiner is appointed in his subject.

6. A university having more than one college should have separate sets of examiners for each college, with internal examiners from the concerned college.

7. Examiners should rotate at an interval of 2 years.

8. There should be a Chairman of the Board of paper-setters who shall be an internal examiner and shall moderate the questions.

9. Grace marks upto a maximum of 5 may be awarded at the discretion of the university for a student who has failed only in one subject but has passed in all the subjects.

10. All others with the rank of Reader or equivalent and above with requisite qualifications and experience shall be appointed Internal Examiners by rotation in their subjects; provided that where there are no posts of Readers then an Asstt. Professor of 5 years standing as Asstt. Prof. may be considered for appointment as Examiner.

X. Professional Examinations

The examinations are to be conducted with a view to ascertain whether the candidate has acquired the necessary minimum skills alongwith clear concepts of the fundamentals which are necessary for him to carry out his professional day to day work competently. Examination of details shall be avoided.

There shall not be more than two examinations in a year, with an interval of 4 to 6 months between the examinations.

Special classes, seminar, Practicals etc.. shall be arranged for the repeaters in the subject in which they hav failed before they are allowed to appear at the next examination, for which attendance must be compulsory.

It is desirable to introduce semester system during training and Examination for the 1st (pre-clinical) and 2nd Phase (Para-clinical) of training.

General :

1. 50% of the total marks-value of questions in the Theory paper should preferably be of short structure/objective type.

2. The candidates must pass in Microbiology, pathology. Forensic Medicine and Pharmacology of II Professional before they are allowed to appear in the Final M.B.B.S. Examination.

3. The candidate who has passed in one subject need not appear in that subject again in any subsequent examination.

Scheme of Examination :

1. Phase I (Anatomy, Physiology and Biochemistry)

(a) (Anatomy, physiology and Biochemistry) 80 marks each

Oral	40 marks
Practical	50 marks
Terminal Examination (20 marks to be added to each theory paper)	40 marks
Day to day assessment (10 marks to be added to oral)	10 marks
	Total 300 marks

(b) Physiology written 2 papers of 80 marks each

Oral	40 marks
Practical	50 marks
Terminal Examination (20 marks to be added to each Theory paper)	40 marks
Day to day assessment (10 marks to be added to Oral)	10 marks
	Total : 300 marks

(c) Bio-chemistry written 80 marks

Theory-One paper of	
Oral	15 marks
Practical	25 marks
Terminal Examination—20 plus day to day assessment 10.	30 marks
	Total : 150 marks

Pass—50% in the aggregate in each of the subjects separately with a minimum of 50% in theory.

2. **Phase II** (Para-clinical subjects)

(*a*) Pathology and microbiology—

Written two papers of 80 marks each (one paper in Pathology; one paper in Microbiology, Parasitology, & Virology)	160 marks
Oral	40 marks
Practical	50 marks
Terminal Examination (20 marks to be added to each theory paper)	40 marks
(10 marks to be added to oral)	10 marks
Total :	300 marks

Pass—50% in aggregate with a minimum of 50% in theory.

(*b*) Pharmacology—

Written theory one paper	80 marks
Oral	15 marks
Practical	25 marks
Internal Assessment (Terminal—20, class work—10)	30 marks
Total :	150 marks

(*c*) Forensic Medicine—

Written theory one paper	80 marks
Oral	15 marks
Practical	25 marks
Internal assessment (Terminal—20, class works—10)	30 marks
Total :	150 marks

Note :- Alternatively 'the examination in Pharmacology & Microbiology may be held at the end of 12 months from the commencement of the 2nd Professional course after having completed the course requirements within the above period.

In this case the marks for examination in Pathology and Microbiology will be as follows:—

(*a*) Pathology—

Written theory one paper	80 marks
Oral	20 marks
Practical	25 marks
Internal assessment (Terminal examination and class work)	25 marks
Total :	150 marks

(*b*) Microbiology, Parasitology & Virology—

Written theory one paper	80 marks
Oral	20 marks
Practical	25 marks
Internal assessment (Terminal examination and class work)	25 marks
Total :	150 marks

Phase III Clinical Subject—

Part I : to be done not less than 6 months prior to Part II.

(*a*) Community Medicine

Written theory one paper	100 marks
Oral	20 marks
Practical & Clinical	50 marks
Internal assessment (Terminal—20, class work—10)	30 marks
Total :	200 marks

Pass—50% in the aggregate
with minimum of
50% in theory.

Note :- Where the examination in community Medicine is at present being held along with Medicine, Surgery and Obst. & Gynae., the practice may continue for the present.

(b) Eye and E.N.T.

One paper of two parts

Part A. Ophthalmology written	40 marks
Oral	25 marks
Clinical	25 marks
Internal assessment	10 marks

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Part B. E.N.T. Written	40 marks
Oral	25 marks
Clinical	25 marks
Internal assessment	10 marks
	200 marks

For a pass, a minimum of 50% in each of the subjects.

If a candidate gets 50% in one of the subjects, he may be declared pass in that subject and would not be required to repeat the same. However for passing in the remaining subjects, he must get not less than 50% in that subject.

Part II

Each paper should have two sections. Questions requiring essay type answers may be avoided.

(*a*) Medicine

Paper I—General Medicine (Section I) Paediatrics (Section 2)

Paper II—General Medicine (including Psychiatry, Dermatology, Leprosy and V.D. Radiology & Electro Therapeutics as applied to Medicine)

Written—2 papers of 80 marks each	160 marks
Oral	40 marks
Clinical	150 marks
Internal assessment theory	40 marks
Internal assessment clinical	10 marks
	400 marks

Pass—50% in the aggregate, provided the candidate obtains 50% in the clinical examination,

(*b*) Surgery

Paper I— General Surgery, (Section 1)Orthopaedics (Section 2)

Paper II—General Surgery, including Anaesthesiology, Dental diseases and Radiology and Electro Therapeutics in their application to Surgery.

Written—2 papers of 80 marks each	160 marks
Oral Practical	40 marks
Clinical	150 marks
Terminal Examination (20 marks to be added to theory paper)	40 marks
Day to day assessment of clinical work	10 marks
	400 marks

Pass—50% in the aggregate provided the candidate obtains 50% in the clinical examination.

(*c*) Obstetrics and Gynaecology

Written—One paper of	80 marks
Oral 40 plus record 10	50 marks
Clinical	50 marks
Terminal Examination	20 marks
Total	200 marks

Atleast one question must be on Family Planning and population dynamics and one on Social Obstetrics.

Pass – 50% in the aggregate provided the candidate obtains 50% in the clinical examination.

Note : I. One half of paper I in Medicine should be related to paediatrics and the other half to Medicine.

II. Paper I of Surgery should have 2 sections one each for Orthopaedics and General Surgery.

III. The Paediatrics, Orthopaedics, part of theory papers in Medicine & Surgery should be set and assessed by examiners who are teachers in the speciality concerned.

IV. The E.N.T. and Ophthalmology examinations shall be conducted by the teachers in the speciality concerned.

V. Separate answer books should be provided for each part of any one paper.

VI. There will be no separate clinical and viva examination in Paediatrics, Orthopaedics. There shall form part of a common clinical and oral examination, but at least one of the examiners in Medicine/Surgery shall be a teacher in Paediatrics/Orthopaedics.

Internal Assessment

Regular periodical examinations should be conducted throughout the course. The question of number of examinations is left to the institution.

Marks may be alloted for the terminal examination and day to day assessment to be carried over to the University examinations as indicated.

(*a*) The results of such terminal examination be decided whithin one month of completion of such examination.

(*b*) 10 marks may be awarded to day to day records including record of case sheets etc.

(*c*) The records of such examination should be made available to the Council, if and when required and the records of assessment may be retained till six months after the candidate finishes his course of training.

(*d*) Results of such periodical examinations and assessment of a particular subject are made available by the university only to the Board of Examination at the time of final tabulation.

Percentage of attendance for appearing in any examination :

75% of clinical/practical and 75% of the theory in each subject in each year.

INTERNSHIP

XI. Internship

1. All parts of the internship shall be done as far as possible in institutions of India.. In case of any difficulties, the matter may be referred to the Medical Council of India to be considered on individual merit .
2. Every candidate will be required after passing the final MBBS examination to undergo compulsory rotation internship to the satisfaction of the University for a period of 12 months so as to be eligible for the award of the degree of M.B.B.S. and full registration.
3. The University shall issue a provisional M.B.B.S. pass certificate on passing the final examination.
4. The State Medical Council will grant provisional registration to the candidate on production of the provisional M.B.B.S. pass certificate. The provisional registration will be for a period of one year. In the event of shortage or unsatisfactory work, the period of provisional registration and the compulsory rotating internship may be suitably extended by the appropriate authorities.

5. The intern shall be entrusted with clinical responsibilities and his work shall be supervised by the senior medical officer.

6. The Compulsory Rotating Internship for 12 months should be done in teaching and non-teaching approved hospitals like District Hospitals and Rural Health Training Centre/Upgraded Primary Health Centres attached to the teaching institutions. Satisfactory collaboration must exist between such hospitals/ rural centres and the medical colleges. The Compulsory Rotating Internship shall include training in Medicine, Surgery and Obstetrics & Gynaecology and in Community Health work at Rural Health Training Centre of Upgraded Primary Health Centre. The posting in Community Health Work should be for a minimum period of six months. The students should be placed for in service training in family Planning clinics for a period of one month. In the task oriented training the responsibility of the interns as participants in the institutional and domicilliary service programme should receive due attention. For this purpose all necessary inputs should be provided, like accommodation, transport adequateclinical facilities etc.

Provided that where an internee is posted to District/sub-Divisional Hospital for training, there should a committee consisting of representative of the college/University, the State Government and the District administration, who shall regulate the training of such trainee.

Provided also that for such trainee a certificate of satisfactory completion of training should be obtained from the relevant administrative authorities which shall be countersigned by the Principal/Dean of College.

Adjustment to enable a candidate to obtain training in elective clinical subjects may be made.

7. One year's approved service in the Armed Forces Medical Services, after passing the final M.B.B.S. examination shall be considered as equivalent to the pre-registration training detailed above, such training should, as far as possible, be at the base General Hospital.

8. The Intern shall maintain a record of work which is to be verified and certified by the medical Officer under whom he works. Apart from scrutiny of the record of work, assessment and evaluation of training may be undertaken by an objective approach using situation tests in knowledge, skills and attitude during and at the end of the training. Based on the record of work and date of evaluation, the Dean/Principal shall issue certificate of satisfactory completion of training, following which the University shall award the M.B.B.S degree or declare him eligible for it.

9. Full registration shall only be given by the State Medical Council on the award of the M.B.B.S. degree by the University or its declaration that the candidate is eligible for it.

10. Some guidelines in the implementation of the training programme are given below :—

Department of Medicine :

(1) Opportunity for doing minor ward procedures e.g.— peracentasis, lumbar puncture, administration of transfusion etc.

(2) Exposure to work in the clinical pathological laboratory and enable him to acquire the skill to do independently procedures like estimation of Haemoglobin, RBC & WBC count including differential count, blood smear for parasites, sputum examination and urine examination.

(3) Opportunity to participate in interpretation of laboratory and radiological data alongwith the clinical findings to arrive at a diagnosis and observe the treatment given.

(4) They should be required to attend out-patient section for atleast two weeks to familiarise with diagnosis and management of common ailments and to be on first call to attend to medical emergencies.

Department of Surgery :

(1) Acquaintance with the management of surgical emergencies including fractures.

(2) Exposure to work in the intensive care unit with particular reference to resuscitation procedures.

(3) The practical implementation of asceptic technique including preparation of operation theatres and sterilization.

(4) Participation in pre-operative and post operative care and exposure to practical use of anaesthetic techniques.

(5) Work in Casualty department.
Surgical emergencies should be tackled by an intern strictly under expert supervision only.

Department of Obstetrics, Gynaecology and Family Planning :

(1) Antenatal care with particular reference to the nutritional factors involved.

(2) There should be adequate training in family welfare programme in the graduate medical course.

Practical experience in the Contraceptive technology and operative technique in sterilization must be emphasised.

(3) Management of normal and abnormal labours.

(4) Care of the new born.

(5) Exposure to well baby clinic, to the working of the well baby clinic.

(6) Provision be made for a training in Paediatrics for 4 to 6 weeks during the posting to this department.
Every intern must work at a well baby clinic, ANC, P.N.C. F.P. Clinic & immunisation centre.

Community Health—Rural Posting :

Rural experience should train the doctor to become the leader of the health team. It should involve.

(*a*) Supervisory responsibility—Administrative.
—Technical

(*b*) Community based health Activities, Organisation implementation.
Control of communicable diseases (special emphasis on Tuberculosis, Leprosy and V.D.)
Implementation of Public Health Programme.
Applied Nutrition.
Maternity & Child Health, Family Planning, School Health and Nutrition.
Health Education etc.

Medico Legal Work :

During the period of internship in Medicine and Surgery, the medico-legal aspects should also be emphasised and co-operation of the Forensic Medicine Department be sought.

Teachers Training :

In order to effectively implement the programme of producing qualified medical graduates so as to enable them to function effectively under the prevailing socio - economic conditions of our country, it is essential that workshops are held for teachers of medical colleges in different parts of the country at a State and National level to orient them to:-

(1) Problems of community health and delivery of health care.

(2) Methods of teaching and examination in relation to the objectives of graduate education.

Facilities :

For proper training of students, facilities as recommended in the Pamphlets of Medical Council of India on ;

(1) "Minimum Standard Requirement for a medical college for 100 admission annually" as amended from time to time.

and

(2) "Recommendations on the qualification required for appointment of persons to posts of teachers and visiting physicians/ surgeons, etc. in medical colleges and attached Hospitals for graduate and post graduate teaching" as amended from time to time.

Should be provided.

General Remarks :

The recommendations made above lay down the broad principles and minimum requirements of the Council. The details are left to Universities. Within these broad principles enumerated above, Experiments in medical education may be undertaken.

(The appendices to these recommendations suggest guidelines in specialised fields which may be given due consideration in drawing out the syllabi.)

APPENDIX 'A'

Curriculum in 'Family Planning' for the M.B.B.S. Course

The curriculum may be considered under various pre-and para-clinical heads, and the following details are worked out for each of the disciplines.

1. Anatomy

1.1 Gross and microscopic anatomy of the male and female generative organs.

1.2 The Menstrual cycle.

1.3 Spermato genesis and Oogenesis.

1.4 Fertilisation of the ovum.

1.5 Tissue and organ changes in the mother in Pregnancy.

1.6 Embryology and Organogenesis.

1.7 Principles of Genetics.

1.8 Applied anatomy of mechanical methods of preventing conception.

(*a*) in female——chemical contraceptive, pessaries, IUCD, tubectomy.

(*b*) in male ;:condom, vasectomy.

2. Physiology

2.1 Physiology of reproduction.

2.2 Endocrines and regulation of reproduction in the female.

2.3 Endocrines and physiology of reproduction in the male.

2.4 Physiology and Endocrinology of pregnancy, parturition and lactation.

2.5 Nutritional needs of mother and child during pregnancy and lactation.

2.6 The safe period-rhythm method of contraception.

2.7 Principles of use of oral contraceptives.

3. Pharmacology

3.1 Mode of action and administration of :

(*a*) Chemical contraceptive.

(*b*) Oral contraceptive.

3.2 Contra indications for administration.

3.3 Toxic effects.

4. Community Medicine

4.1 The need for Family Planning.

4.2 Organisation of Family Planning service.

4.3 Health Education in relation to Family Planning.

4.4 Nutrition.

4.5 Psychological needs of the mother, the child and the family.

4.6 Demography and vital Statistics.

5. Obstetrics And Gynaecology

5.1 Contraceptive method, male/female.

(*a*) Mechanical
1. Pessaries, IUCD, Condoms.
2. Tubectomy and Vasectomy.

(*b*) Chemical

(*c*) Oral

(*d*) Rhythm Method.

5.2 Demonstrations of use of Pessaries, IUCD, Condoms and technique of tubectomy.

5.3 Advice on family Planning to be imparted to parents.

6. Paediatrics

6.1 Problems of child health in relation to large family.

(*a*) Organisation of paediatric services.

(*b*) Nutritional problems of mother and child.

(*c*) Childhood diseases due to overcrowding.

7. Surgery

Technique of Vasectomy

8. Compulsory Internship

Placement of a student for in-service training in a family Planning clinic for a period of at least one month.

2. Examinations

It is necessary that questions on family planning be introduced in the theory, practical and oral examination throughout the M.B.B.S. course.

The curriculum content has been indicated subjectwise. However, it would be more advantageous to the student for purpose of integrated learning, and for understanding of the subject if family planning instruction with the curriculum content indicated could be divided into three phases.

Phase I **Instruction Anatomy**

Physiology, Biochemistry and Pharmacology

There should be close integration in the teaching of these subjects. It is suggested that during the pre-and early para-clinical years, two to three weeks may be set apart for Instruction in Family Planning relating to these subjects; so that the student gets an overall under standing of the principles and practice of 'Family Planning' within the limited time availabale for covering all the subjects of the medical course. The method suggested would save time and repetition of essential facts.

Phase II

This includes the later para-clinical and clinical courses. The practical aspects of Family Planning methods should be emphasised.

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This programme of instruction should be supervised by the Department of Obstetrics and Gynaecology and the departments of Community. Medicine. Internal Medicine, Psychiatry, Paediatrics and Surgery must be closely associated in imparting instruction and relating to the problems arising for want of family planning and the advantages to society and the individual which will be gained by adopting the measures suggested.

Phase III

Period of Compulsory Internship. During this period there must be one month's practical in-service training, during which period the student is attached to a planning clinic.

Seminars

The medical colleges should organise occasional seminars in which staff from all departments and the in-service trainees should participate.

APPENDIX 'B'

Curriculum on Social and Preventive Medicine for Graduate Teaching

Summary

(a) The teaching of social & Preventive Medicine should have place throughout the teaching period.

(b) Field experience in rural health should be included in pre-clinical as well as during clinical period.

(c) During the students attendance at various departments which is now required under medicine and surgery, such as infectious diseases, T.B. Leprosy, V.D. etc. emphasis should be laid as much on the preventive as on the clinical Therapeutic aspects of these diseases.

(d) In addition to the teaching undertaken by the departments of Social & Preventive Medicine a joint programme with other departments is essential in order to give the students a comprehensive picture of man, his health and illness.

(e) Stress be laid on national programmes, including those of control of communicable diseases and family planning and health education.

(f) A separate examination in Social & Preventive Medicine may be undertaken in the 2nd professional examination. Questions on the preventive and social aspects of diseases should also be included in the examination in clinical subjects at the final M.B.B.S.

(g) An epidemiological unit as an integral part of every hospital in order to achieve a comprehensive study of diseases by the students should be established.

(h) The objective of the internship should be clearly defined and a proper training programme be oriented for this period.

Objectives, and the methods by which the internship could be made into a much more satisfying and fruitful experience than at present have been laid down. This is one of the Weak links of the teaching programme and there is an urgent need for planning in this phase of education.

(i) As regards the qualifications of the teachers, it is highly important that all teachers in Social & Preventive Medicine should have as far as possible had adequate administrative experience|in addition to the teaching experience. They should also be encouraged to acquire skills in clinical subjects specially related to community medicine.

The following are the recommendations of the Council.

Graduate or M.B.B.S. Course

Curriculum

(a) The present educational system requires those students intending to undertake medical studies to choose the science group of subjects. In order to prepare the student for professional education and to foster in him the social concepts which are essential to the professional doctors as a citizen and as practising physician in the community, the element of humanities which had been omitted, should be added in the pre-clinical years. Hence it is imperative that the social concepts of medicine should be incorporated and emphasised alongwith other disciplines.

(b) A minimum of 30 hours for didactic teaching, practicals, demonstrations and 15 field visits each for full day for understanding of rural health problems be undertaken during the first three terms :

(i) Personal Hygiene

(ii) Bio-statics and Vital Statistics.

(iii) Human Ecology

(iv) Elementary Psychology.

(v) Elementary Social Science.

(vi) Normal Growth and Development.

(vii) Nutrition and dietetics.

A number of these items could be undertaken in collaboration with the departments of Physiology and Bio-chemistry and should be an integral part of their teaching.

(c) Hospital attachments should start from the first term.

(d) The mainstay of the training programme should be lecture, demostration, group discussions and seminars with a minimum of didactic lectures,

(e) The teaching of community medicine should be undertaken by the department of Preventive and Social Medicine/Community Medicine in co-ordination with other departments.

The following subjects should be included in the teaching programme during the first three terms.

A (a) Introduction of Community Medicine.

(b) Principles of sociology including demography, population dynamics and elements of bio-statistics, social factor related to health and diseases, urban and rural societies urbanised impact on health and diseases, community behavior and ecology.

(c) Elements of normal psychology and social psychology, teaching of community medicine should be both theoretical as well as practical. The practical aspects of the training programme should include visits to the health establishment and to the community where health intervention programme are in operation.

B. Clinical

(a) A course of systematic instructions in the principles and practice of social and preventive medicine which should extend throughout the whole period of study.

(b) There should be a minimum of 250 hours in total for attendance of lectures, demonstrations, seminars, conferences, field visits and practical during the clinical period.

The following subjects shculd be included in the teaching programme :—

(i) The Medical Statistics, includihg collection, tabulation, presentation and the interpretation of data and the use of statistical methods.

(ii) Environmental hygiene, including man and his environment, occupational and industrial hygiene, village and town sanitation, bacteriology of water, milk, food and food hygiene.

(iii) Parasitology, Helminthology and entomology in relation to communicable diseases, their prevention and control.

(iv) Principles of epidemiology.

(v) Communicable diseases, their prevention and control.

(vi) Public Health administration, including the requirements of international health and other health organisations.

(vii) Advanced courses on nutritional deficiencies.

(viii) Community Medicine-Teaching should include clinico-socio-pathological conferences with other departments, maternal and child health care including family planning and school health, supervised field study and visits.

(c) In order that the discipline of social & preventive medicine is presented in its proper perspective every effort should be made to coordinate the people programme of the department with the various departments of medicine, surgery, Obst. & Gynae, etc. to give the student correct and intergrated approach to the practice of medicine.

(d) To study disease in a comprehensive manner, it is essential that an epidemiological unit be set up in the outpatient department of the teaching hospital. Such an epidemiological unit will enable the students to understand the social economic and environmental factors in relation to illness during his training period.

(e) During the students attendance at the specialist deptts, instruction in the preventive aspects should be emphasised during the study.

(i) Acute infectious disaeses and other local endemic diseases, for example, trachoma, goitre, filariasis etc.

(ii) Tuberculosis.

(iii) Preventive aspects of psychological medicine and psychiatry.

(iv) Preventive aspects of leprosy.

(v) V. D. Control.

(vi) Preventive aspects of dietetics and Nutrition, information on all national health programmes and the role of international health organisation should be given in order that the medical graduate may participate in the successful implementation of these schemes during his career after graduation.

(f) In order to make the students practise what is being taught, it is absolutely necessary that the hospital where he works and the hostel where he resides, should be a model of sanitation. To this extent he should be involved along with the professors of the various disciplines of the hospital, and other authorities concerned, to take a keen interest in the environmental sanitation.

(g) Principles of health education including the education of hospital and health staff, patients and their relatives within the hospitals.

(h) The medical students should be given demonstration on family planning at a family planning centre attached to the medical college or at a recognised health centre during the regular course for graduate training either under the department of obstetrics and gynaecology or Social Preventive Medicine. The concept of family planning and population control.

(i) Every student should be required to submit one satisfactory written history of a community health survey undertaken under the guidance of staff of the Social and preventive Medi-

cine in a rural area and one written case history of a patient followed up with the assistance of the epidemiological unit, in coordination with the department concerned and the department of Social & Preventive Medicine.

(a) Compulsory Medicine

Phase I Preclinical Period : First & academic terms

The entire class is dividend into 2 batches. Once a fortnight by rotation one batch to work in the hospital for practical experience in the following area :

(1) Nursing including bed making.

(2) Practice of sterilisation.

(3) Techniques of disinfection & Dressing.

(4) Management of hospital including clean linen.

(5) Beside mannersand medical ethics

(6) Art of communication, History taking, winning the confidence of the patient.

(7) Record keeping-completeness and reliability.

(8) Patient psychology-understanding the patient's perception of his problem.

(9) Medico-social work.

(10) Principles of health education-Doctor's role.

The other Batch, by rotation goes for group discussion, seminar and lecture/demonstration in the following :

(1) Demography and population dynamics.

(2) Way of life in Urban and rural societies.

(3) Process of urbanisation and its impacts.

(4) Behaviour of community.

(5) Inter-dependence and inter-relation between man and his environment including Nutrition.

(6) Health monitoring, including nutrition.

Time allotted : 6 hrs/month for 10 months 60 hrs.

Field Visits' :

Once a fortnight all the students shall make field visits and for this purpose, the class may be divided into batches of 20 students. Detailed programme may be drawn up by each college for this purpose.

The following aspects will be covered during these visits :

(1) Factorsdetermining health and disease including environmental influences.

(2) Applied sociology-importance of community participation.

(3) Limited resources – Necessity of maximisation of utilisation.

(4) Import of nutrition on Health & Disease.

Field Posting for Community Health During IInd Clinical Year :

The students should be posted in small batches for residential posting of one month at selected approved Primary Health Centre/Rural Training Centres during the fourth clinical term II Clinical year).

During this period they should participate in the promotive, preventive and curative activities of the health centre so as to get an insight into the socio economical, cultural and psychological factors influencing the pattern of health and disease in the community as a whole.

The family should be the unit of study rather than an individual patient so that the impact of health problems on the family can be observed and understood by the students.

They should actively participate in the implementation of the national health programmes, family planning and M.C.H. activities and health education.

They should take an opportunity to investigate epidemic outbreaks, whenever such a situation arises.

This training will also be under the supervision of a teacher from the medical college faculty who will be given residential posting at the rural centre for not less than two months.

The teacher should attempt to demonstrate the practice of comprehensive health care which can be practised at the village and the level

at which referral to better facilities is essential. Various officers of health services should also be utilised for this part of training.

Teachers from the entire faculty of medical college should be given adequate orientation and then posted in turns to rural centres for the training of graduates in community health.

Examinations :

There should be separate university examination in Social and Preventive Medicine which may be held alongwith other subjects at the III professional examination or six months earlier as provided

4. Compulsory Rotating Internship—Rural Training

It is essential to outline the objectives that are to be achieved during the 6 months rural stay during internship period. An outline of the objectives to be achieved is suggested.

(a) Administrative aspects.

(b) Preventive aspects.

(c) Clinical aspects.

(a) Administrative Aspects

1. Under adminstrative aspects, rural internship should serve to orient the student in the political structure and administration of a rural area, and in the actual working of those organisation concerned with local self government namely, zilla parishads, the panchayat samities, and other facets of community development work.

2. It should serve to orient the intern with the concept of team work with para-medical health workers, namely the health visitor, the vaccinator, the sanitary inspector, the social scientist and the health educators, especially in connection with national health programmes.

3. It should orient the intern in the social dynamics of a community. This should include thedynamics of leadership, the motivation of a community and the various importanfacetsof influencing leaders in the promotion of health programmes. This is an integral part of the appli-

cation of health education principles in the promotion of development work.

4. It should serve to orient the doctors on the administrative aspects of various national health programmes which are an integral part of work at the primary health centres. These should primarily be such programmes-—

(a) the malaria eradication programme.

(b) small pox eradication programme.

(c) tuberculosis control

(d) Family planning

(e) certain specific communicable diseases, such as filaria, leprosy, trachoma, V.D. etc.

5. It should serve to put the health programme in the prespective of the overall national development programmes, namely agriculture, education, social welfare, etc.

(b) Preventive Aspects

1. It should serve to orient the intern in the organisation and management of a comprehensive health service for a community. This programme should invaribly include the environment of the community.

2. It should serve to orient the intern in the role of individual members of the health team and of important leaders in a community.

3. It should serve to orient the doctor on the keeping of adequate statistical records and of the interpretation of health indices.

4. It would serve to orient the doctor towards the effective utilization of all resources in the community for promotion of health programmes.

5. It would serve to indicate that illness is an episode in the total frame work of an individual's health. The needs for adequate contact tracing and follow up of sick patients after therapeutic treatment should be demonstrated, to the maximum in a rural community.

6. It should give an indication of the priority need of various facets of health programmes, such as the importance of immunisation, importance of nutritional education, care of pre-school child, etc.
7. The social effects of illness of an individual and family and result of socio-economic factorss in causing illness should be demonstrated.
8. The planning and evaluation of a community health service.

(c) **Clinical Aspects**

1. It should sharpen an individuals diagnostic capacity, so that he may be able to make use of his individual senses without dependence on expensive aids, such as laboratory, X-ray etc.
2. It should permit an individual taking responsibility for minor illness and surgical complications.
3. It should serve to indicate his limitation and realization of when to call for consultative services or a referral.

The methods by which this could be achieved :

1. A planned programme in order that all students could have an opportunity to meet with village representatives and to participate in village meetings, especially those of the health committee. In order to effectively demonstrate the role of community leaders in a health programme, it should be the duty and responsibility of the staff of the rural field centre to form a health committee in every rural field training area.
2. The role of other officials in the village, namely the teacher, the village level worker, etc. should also be demonstrated and the students should be given an opportunity to meet with the block development officers and his staff, and to become familiar with the other development programme in the village.
3. Every effort be made to ensure that the hostels and the houses of the staff of the health centre, as well as the

surroundings of the centre itself should be such that minimum facilities, such as protected and safe water, latrine etc. are provided. Wherever possible, the students should be made to live in the village, but under hygienic conditions which are capable of reproduction by the villager.

4. The students should have an opportunity of visiting and being demonstrated the various national health programmes. For this purpose, the staff of the rural field training area should have liaison with the staff of the, various national health programmes.

5. It should be ensured that the primary health centre is supplied with adequate vaccines and sera and modern drugs.

6. The administrative aspects of running a primary health Centre should be demonstrated to students and they may be allowed to make suggestions in such matters, as the purchase of drugs, the type of basic equipment, the cost of the diet, etc. and how the centre funds could best be utilized.

7. They should have every opportunity of working with the health centre staff and visiting the homes. The principles of health education and the approach to a community, and to an individual should also be effectively demonstrated to them and the students be required to practice this under skilled supervision.

8. To effectively implement the above requirments, the staff of the field training area be adequate in number, be properly trained, and have the facilities to undertake the teaching and training that are required.

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